

### **Amendment to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

Claim 1 (currently amended): A nickel alloy sputtering target for forming a film for preventing tin (Sn) diffusion, comprising a sputtering target body of a predetermined diameter and a predetermined thickness adapted to form a thin film via magnetron sputtering, said sputtering target ~~consisting~~ body being made of a composition of 1 to 30 ~~at%~~ atomic percent of copper (Cu); 2 to 25 ~~at%~~ atomic percent of at least one element selected from ~~among a group~~ consisting of vanadium (V), chromium (Cr), aluminum (Al), silicon (Si), and molybdenum (Mo); and remnant nickel (Ni) ~~and unavoidable impurities~~.

Claim 2 (currently amended): The nickel alloy sputtering target according to claim 1, wherein the copper in said sputtering target body exists in a solid solution, and wherein the nickel alloy is formed by adding said at least one element ~~selected from among V, Cr, Al, Si, and Mo~~ to a Ni-Cu solid solution.

Claim 3 (canceled).

Claim 4 (currently amended): A nickel alloy thin film formed between a solder bump and a substrate layer or a pad, said nickel alloy thin film comprising 1 to 30 ~~at%~~ atomic percent of copper (Cu); 2 to 25 ~~at%~~ atomic percent of at least one element selected from ~~among a group~~

consisting of vanadium (V), chromium (Cr), aluminum (Al), silicon (Si), titanium (Ti) and molybdenum (Mo); and remnant nickel (Ni) ~~and unavoidable impurities~~.

Claim 5 (currently amended): The nickel alloy thin film formed between a solder bump and a substrate layer or a pad according to claim 4, wherein the copper exists in a solid solution in said thin film, and wherein the nickel alloy is formed by adding said at least one element ~~selected from among V, Cr, Al, Si, Ti and Mo~~ to a Ni-Cu solid solution.

Claims 6-11 (canceled).

Claim 12 (previously presented): A nickel alloy thin film according to claim 4, wherein the solder bump is a Pb-free Sn solder or a Sn solder.

Claim 13 (currently amended): A nickel alloy thin film according to claim 12, further comprising ~~a Cu-Sn~~ an intermetallic compound layer between the solder bump and the substrate layer or pad, said intermetallic compound layer consisting of Cu and Sn.

Claim 14 (previously presented): A nickel alloy thin film according to claim 13, wherein said Cu-Sn intermetallic compound layer is of a thickness of 0.01 to 5 $\mu$ m.

Claim 15 (currently amended): A nickel alloy thin film according to claim 4, further comprising ~~a Cu-Sn~~ an intermetallic compound layer between the solder bump and the substrate layer or pad, said intermetallic compound layer consisting of Cu and Sn.

Claim 16 (previously presented): A nickel alloy thin film according to claim 15, wherein said Cu-Sn intermetallic compound layer is of a thickness of 0.01 to 5 $\mu$ m.

Claim 17 (canceled).

Claim 18 (currently amended): The nickel alloy sputtering target according to claim 1, ~~further comprising~~ wherein said composition of said sputtering target body includes titanium (Ti), wherein a total amount of Ti together with said at least one element ~~selected from among V, Cr, Al, Si and Mo~~ is 2 to 25 at% atomic percent.

Claim 19 (currently amended): A nickel alloy sputtering target, consisting of:  
a sputtering target body of a predetermined diameter and a predetermined  
thickness adapted to form a thin film via magnetron sputtering;  
said sputtering target body being made of a composition consisting of 1 to 30 at%  
atomic percent of copper (Cu); 2 to 25 at% atomic percent of at least one  
an additional element selected from among a group consisting of  
vanadium (V), chromium (Cr), aluminum (Al), silicon (Si), and  
molybdenum (Mo); and remnant nickel (Ni);  
the copper in said sputtering target body existing in a solid solution; and  
said sputtering target body having a single phase metallographic structure and an  
average grain size of 100 $\mu$ m or less; ~~and~~

~~each of the copper, the at least one additional element, and the nickel of said sputtering target being of a purity of at least 99.9% (3N).~~

Claim 20 (canceled).

Claim 21 (new): A nickel alloy sputtering target according to claim 19, wherein said additional element is chromium (Cr), aluminum (Al), silicon (Si), or molybdenum (Mo).

Claim 22 (new): A nickel alloy sputtering target according to claim 19, wherein said additional element is aluminum (Al), silicon (Si), or molybdenum (Mo).

Claim 23 (new): A nickel alloy sputtering target according to claim 22, wherein said predetermined thickness of said sputtering target body is 10mm.

Claim 24 (new): A nickel alloy sputtering target according to claim 1, wherein said at least one element is chromium (Cr), aluminum (Al), silicon (Si), or molybdenum (Mo).

Claim 25 (new): A nickel alloy sputtering target according to claim 1, wherein said at least one element is aluminum (Al), silicon (Si), or molybdenum (Mo).

Claim 26 (new): A nickel alloy sputtering target according to claim 1, wherein said predetermined thickness of said sputtering target body is 10mm.

Claim 27 (new): A nickel alloy sputtering target according to claim 1, wherein said predetermined diameter of said sputtering target body is 80mm.

Claim 28 (new): A nickel alloy thin film according to claim 4, wherein said at least one element is chromium (Cr), aluminum (Al), silicon (Si), or molybdenum (Mo).

Claim 29 (new): A nickel alloy thin film according to claim 4, wherein said at least one element is aluminum (Al), silicon (Si), or molybdenum (Mo).